

10/29/13 - Homework:

- 3.1 p. 168-170 (8-38 evens, 44-50 evens, 60)

Write an inequality that represents each verbal expression.

See Problem 1.

8. v is greater than or equal to 5.

9. b is less than 4.

10. 3 less than g is less than or equal to 17.

11. The quotient of k and 9 is greater than $\frac{1}{3}$.

Determine whether each number is a solution of the given inequality.

See Problem 2.

12. $3y - 8 > 22$

a. 2

b. 0

c. 5

13. $8m - 6 \leq 10$

a. 2

b. 3

c. -1

14. $4x + 2 < -6$

a. 0

b. -2

c. 1

15. $\frac{6-n}{n} \geq 11$

a. 0.5

b. 2

c. 4

16. $m(m - 3) < 54$

a. -10

b. 0

c. 9

Match each inequality with its graph.

See Problem 3.

17. $x < -1$

18. $x \geq -1$

19. $-1 < x$

20. $-1 \geq x$



Graph each inequality.

21. $y > 2$

22. $t < -4$

23. $z \leq -5$

24. $v \geq -2$

25. $-3 < f$

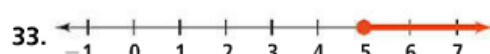
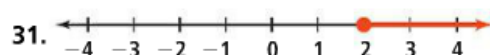
26. $\frac{9}{4} \leq c$

27. $8 \geq b$

28. $5.75 > d$

Write an inequality for each graph.

See Problem 4.



Define a variable and write an inequality to model each situation.

See Problem 5.

35. The restaurant can seat at most 172 people.

36. A person must be at least 35 years old to be elected President of the United States.

37. A light bulb can be no more than 75 watts to be safely used in this light fixture.

38. At least 475 students attended the orchestra concert Thursday night.

39. A law clerk has earned more than \$20,000 since being hired.

Write each inequality in words.

44. $n < 5$

45. $b > 0$

46. $7 \geq x$

47. $z \geq 25.6$

48. $4 > q$

49. $21 \geq m$

50. $35 \geq w$

51. $g - 2 < 7$

52. $a \leq 3$

53. $6 + r > -2$

54. $8 \leq h$

55. $1.2 > k$

60. **Reasoning** Which is the correct graph of $-3 < -x$? Explain.

